

A NEW FRESHWATER FISH OF THE GENUS *BARILIUS*
HAMILTON (PISCES: CYPRINIDAE) FROM WEST
BENGAL, INDIA¹

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(With a text-figure)

A new species of the cyprinid fish genus *Barilius* Hamilton collected from Jalpaiguri district (North Bengal), West Bengal, India is described under the name *B. howesi*. The new species is related to *B. barna* (Hamilton) and *B. barila* (Hamilton) but clearly differs from them in head length, body depth and eye diameter.

between 27°-27.5°N latitude and 96.5°-97° E longitude. During the course of my revisionary studies on the cyprinid fish genus *Barilius* Hamilton from the Indian subcontinent, I came across three examples which, when compared with the known species appeared to represent a hitherto undescribed species under the genus.

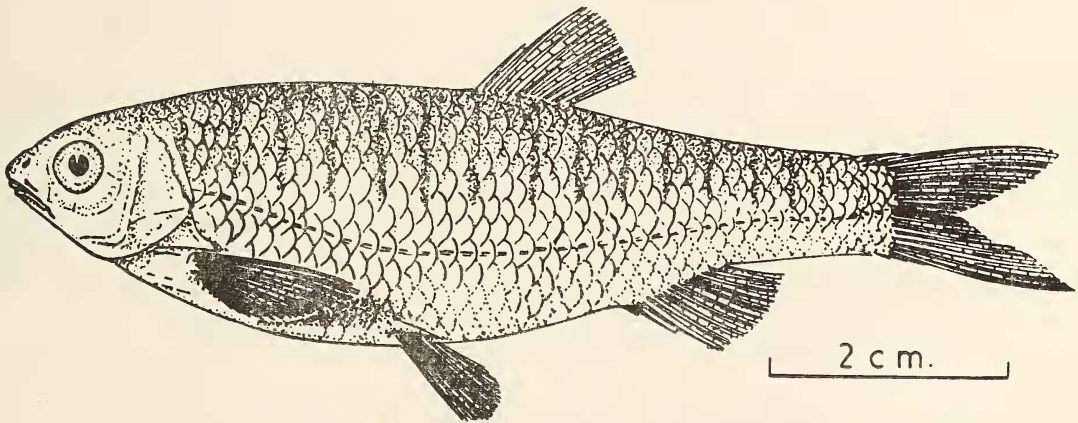


Fig. 1. Lateral view of the holotype of *Barilius howesi* sp. nov.

INTRODUCTION

Day (1889) recorded 14 species and Jayaram (1981) enumerated 16 belonging to the genus *Barilius* from the Indian subcontinent. Barman (1985) has since added one more new species under the genus from Arunachal Pradesh (formerly NEFA) India which lies

Measurements of the fish given in parentheses in species description are the range of proportions and outside the parentheses are arithmetic mean of the range of proportions.

A detailed description of the new species to the Indian species of the genus is given.

***Barilius howesi* sp. nov.**

Material: Holotype (Fig. 1): 70 mm. in standard length. Zoological Survey of India,

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² Zoological Survey of India, Calcutta.

Calcutta, FF 2235. Locality: stream near sulkapara, Jalpaiguri district (North Bengal), West Bengal, Collector: Dr. H. K. Bhowmick. Date of Collection: 27.8.1975. *Paratypes*: 2 exs., 61 mm.-66 mm. in standard length. Reg. No. Zoological Survey of India, Calcutta. FF. 2236. Locality: Collector and date of collection same as in holotype.

Etymology

For Dr. G. J. Howes of the British Museum (Natural History), London, in recognition of his contributions to systematics of bariline cyprinid fishes.

DIAGNOSIS

Head length 4.35-4.71 and body depth 3.00-3.25 in standard length. Eye diameter 4.00-4.29 in head length. Least depth of caudal peduncle 1.62-1.71 in its length. Lateral line scales 43-45. Lateral vertical bands 14 or 15. Barbels 2 pairs, anterior pairs of barbels longer than posterior pairs of barbels.

DESCRIPTION

Head length 4.50 (4.35-4.71) at the most distant point on the opercular membrane, body depth 3.12 (3.00-4.25) at the origin of pelvic fin, predorsal distance 1.74 (1.73-1.75), prepelvic distance 1.96 (1.94-2.00), preanal distance 1.39 (1.37-1.45) and length of caudal fin 4.37 (4.06-4.66) in standard length. Depth of head 1.15 (1.14-1.16) at the occiput and width of head 1.83 (1.76-1.88) at its widest point in head length. Snout length 4.15 (4.00-2.28) in head length, 1.40 (1.28-1.57) in interorbital width. Eye diameter 4.14 (4.00-4.29) in head length, 1.34 (1.28-1.37) in interorbital width. Length of

the postorbital part of the head is twice that of the preorbital part of head (snout length). Cleft of mouth wide, extending below middle of eye. 2 pairs of barbels, anterior pair 2.33 (2.00-2.66) and posterior pair, 3.27 (2.33-4.00) in eye diameter. Least depth of caudal peduncle 1.65 (1.62-1.71) in its length.

Scales: Lateral line scales 43-45. Lateral transverse scales 12; $8\frac{1}{2}$ between origin of dorsal fin and lateral line, $3\frac{1}{2}$ between origin of pelvic fin and lateral line. 20-21 predorsal and 14 curcumpeduncular scales.

Fins: D. ii, 8; A. iii, 9; P. i, 13; V. i, 8; C. 19. Dorsal commences opposite interspace between pelvic and anal fin, nearer to tip of snout than to base of caudal fin extending over the half length of anal fin. Pelvic originates on a vertical anterior to the dorsal fin. Length of longest dorsal ray 5.62 (5.50-5.83), length of longest anal ray 7.29 (6.77-7.77), pectoral length 4.93 (4.71-5.08) and pelvic length 7.30 (6.94-7.62) in standard length. Caudal fin deeply forked with lower lobe slightly longer than upper one. Pectoral, pelvic and anal fins are all widely spaced.

Colour in alcohol: Dorsal surface brown, sides and ventral surface silvery white. Sides of trunk and caudal peduncle with 14 or 15 vertical dark bands, much narrower than the pale interspaces. Dorsal, anal, pectoral and pelvic fins are hyaline coloured.

Habitat and Distribution: The new species was collected from a stream near Sulkapara, Jalpaiguri district (North Bengal), West Bengal, India which lies between 26°-27° N latitude and 88°-89° E longitude.

RELATIONSHIPS

Barilius howesi is closely related to *Barilius barna* (Hamilton) and *Barilius barila* (Hamil-

ton). The new species can be easily separated from the former species in its shorter head length 4.35-4.71 vs. 3.68-4.00 and greater body depth 3.00-3.25 vs. 3.50-4.00 in standard length; shorter eye diameter 4.00-4.29 vs. 2.50-3.50 in head length; more numerous predorsal scales 20-21 vs. 15-16; more vertical bars 14-15 vs. 9-10.

The new species can be also distinguished from *B. barila* in having a shorter head length 4.35-4.71 vs. 3.90-3.93 and greater body depth 3.00-3.25 vs. 4.77-5.22 in standard length; shorter eye diameter 4.00-4.29 vs. 3.50-4.00 in head length.

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A NEW SPECIES OF *RHYNOCORIS* (FABRICIUS) FROM SOUTHERN INDIA (HETEROPTERA-REDUVIDAE-HARPACTORINAE)¹

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(With six text-figures)

A new species of *Rhynocoris* (Fabricius) viz., *R. kumarii* sp. nov. is described and illustrated. A key for the identification of Indian *Rhynocoris* species is formulated.

***Rhynocoris kumarii* sp. nov.**

Antennae bright red except the base of the scape, rostral tip, eyes, membranes, scutellum, apices of tibiae, tarsomers, abdomen above and beneath black, posterior lobe of pronotum with two pairs of ferruginotestaceous bands running parallel. (Figs. 1-6).

Head finely pubescent, moderately elongate and shorter than pronotum, anteriorly unarmed, a median transverse impression in between eyes dividing the head into almost equal anteocular and postocular areas, anteocular area

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